

What is claimed is:

- 1 1. An equipment storm shield, comprising:
2 an elongated base having a top surface and a bottom surface adapted for
3 coupling to the equipment;
4 an elongated spool support member having a bottom surface mounted on the
5 top surface of the base and a top surface having an elongated concave surface;
6 an elongated spool housing mounted on the concave surface of the spool
7 support member and including an elongated hollow interior portion accessible via an
8 elongated opening extending along a longitudinal edge region of the spool housing;
9 and
10 a first spool of flexible membrane material rotatably mounted in the hollow
11 interior portion of the spool housing and having a first longitudinal edge substantially
12 aligned with the opening located on the spool housing, wherein the first longitudinal
13 edge of the first spool of flexible membrane material is pulled through the opening to
14 remove a first predetermined sheet portion of material from the first spool of flexible
15 membrane material and wherein the first predetermined sheet portion of material is
16 constructed and arranged as a barrier for protecting the equipment against
17 predetermined storm conditions.
- 1 2. The equipment storm shield of claim 1, wherein the base includes a compliant
2 rubber pad adapted to substantially conform to a top surface of the equipment.
- 1 3. The equipment storm shield of claim 1, wherein the spool housing includes a
2 spring loaded tension mechanism adapted to provide a predetermined spring force to
3 the first spool of flexible membrane material to permit the first spool of flexible
4 membrane material to retract the first predetermined sheet portion of material.
- 1 4. The equipment storm shield of claim 1, wherein the spool housing includes a
2 hand cranking mechanism coupled to the first spool of flexible membrane material for
3 permitting manual rotation of the hand cranking mechanism to be transposed to the
4 first spool of flexible membrane material to permit the first spool of flexible
5 membrane material to retract the first predetermined sheet portion of material.

1 5. The equipment storm shield of claim 1, wherein the spool housing includes a
2 pivotably mounted access door that operates to seal the opening located on the spool
3 housing when the equipment storm shield is not in use.

1 6. The equipment storm shield of claim 1, wherein the first spool of flexible
2 membrane material includes at least one of nylon, canvas, plastic, natural materials,
3 synthetic materials, knitted materials, woven materials and chemically coated
4 materials.

1 7. The equipment storm shield of claim 1, further including an anchoring
2 mechanism adapted for being removably coupled to the first longitudinal edge of the
3 first spool of flexible membrane material and for retaining the first longitudinal edge
4 of the first spool of flexible membrane material on a ground surface located a
5 predetermined horizontal distance from a base of the equipment.

1 8. The equipment storm shield of claim 7, wherein the anchoring mechanism
2 includes an angle bracket.

1 9. The equipment storm shield of claim 8, wherein the angle bracket includes a
2 base portion having a plurality of openings each opening being adapted to accept an
3 anchor spike operative to securely retain the base portion of the angle bracket on the
4 ground surface.

1 10. The equipment storm shield of claim 9, wherein the base portion of the angle
2 bracket further include a releaseable attachment mechanism adapted to engage and
3 securely retain the first longitudinal edge of the first spool of flexible membrane
4 material.

1 11. The equipment storm shield of claim 10, wherein the angle bracket further
2 includes a support portion inclined at a predetermined angle from the base portion and
3 being adapted to support the first predetermined portion of flexible membrane
4 material at a predetermined angle.

1 12. The equipment storm shield of claim 11, wherein the predetermined angle
2 includes an angle ranging from approximately 15-degrees to approximately 75-
3 degrees.

1 13. The equipment storm shield of claim 1, wherein the first spool of flexible
2 membrane material further includes a first adjacent edge adapted for coupling to a
3 second adjacent edge of a second spool of flexible membrane material associated with
4 a second equipment storm shield for permitting at least the first predetermined sheet
5 portion of the first spool of flexible membrane material to be coupled to a second
6 predetermined sheet portion of a second spool of flexible membrane material for
7 substantially enclosing the equipment.

1 14. An vehicle mounted storm shield adapted for protecting the vehicle from
2 damage during storming conditions, comprising:
3 an elongated base having a top surface and a bottom surface adapted for
4 coupling to a top surface region of the vehicle;
5 an elongated spool support member having a bottom surface mounted on the
6 top surface of the base and a top surface having an elongated concave surface;
7 an elongated spool housing mounted on the concave surface of the spool
8 support member and including an elongated hollow interior portion accessible via an
9 elongated opening extending along a longitudinal edge region of the spool housing;
10 and
11 a first spool of flexible membrane material rotatably mounted in the hollow
12 interior portion of the spool housing and having a first longitudinal edge substantially
13 aligned with the opening located on the spool housing, wherein the first longitudinal
14 edge of the first spool of flexible membrane material is pulled through the opening to
15 remove a first predetermined portion of material from the first spool of flexible
16 membrane material and wherein the first predetermined portion of material is
17 constructed and arranged as a barrier for protecting the vehicle against predetermined
18 storm conditions.

1 15. The vehicle mounted storm shield, wherein the vehicle includes a highly
2 mobile multi-wheeled vehicle (HUMVEE).

1 16. An equipment storm shield system, comprising:
2 an equipment pad area adapted to provide parking for the equipment;
3 a plurality of anchor devices located along a first portion of a perimeter of the
4 pad area;
5 an elongated spool of flexible membrane material rotatably mounted in a spool
6 housing and being mounted on a second portion of the perimeter of the pad area;
7 an elongated opening located on the spool housing and being adapted to
8 permit a first longitudinal edge of the spool of flexible membrane material to be
9 pulled through the opening to remove a first predetermined sheet portion of
10 membrane material from the spool of flexible membrane material, wherein the first
11 predetermined sheet portion of membrane material is pulled over the equipment
12 parked on the pad area and is retained in position using one or more of the plurality of
13 anchor devices and wherein the first predetermined sheet portion of membrane
14 material serves as a barrier for protecting the equipment against predetermined
15 storming condition.

1 17. The equipment storm shield of claim 16, wherein each of the plurality of
2 anchoring devices includes a metal frame member permanently mounted in a trench
3 and having an opening adapted to accept a corresponding engagement member
4 attached to the first predetermined sheet portion of membrane material.

1 18. The equipment storm shield of claim 16; wherein the first spool of flexible
2 membrane material includes at least one of nylon, canvas, plastic, natural materials,
3 synthetic materials, knitted materials, woven materials and chemically coated
4 materials.

1 19. The equipment storm shield of claim 16, wherein the first predetermined sheet
2 portion of membrane material further includes a first adjacent edge adapted for
3 coupling to a top edge region of a second portion of flexible membrane material and a
4 bottom edge region of the second portion of flexible membrane material being
5 retained in position using one or more of the plurality of anchor devices.

1 20. The equipment storm shield of claim 19, wherein the first predetermined sheet
2 portion of membrane material further includes a second adjacent edge adapted for
3 coupling to a top edge region of a third portion of flexible membrane material and a
4 bottom edge region of the third portion of flexible membrane material being retained
5 in position using one or more of the plurality of anchor devices.

1 21. The equipment storm shield of claim 20, wherein the equipment includes at
2 least one of a helicopter, jet aircraft, vehicle and computer equipment.